

Midwest Ozone Group

CIBO Update
March 5, 2019

- 179B International Contribution
- New 4km OSAT results
 - 1ppb vs 1%
- New York's proposed rule on simple cycle turbines

International Transport Guidance

December 6, 2018 (83 FR 62998) EPA finalized 2015 Ozone Implementation SIP Requirements:

- EPA is not adopting any geographic limitation on the use of CAA 179B for purposes of the 2015 Ozone NAAQS. (**meaning applicable broadly and not limited to border states.**) *Id.*
- Clarifying that a demonstration prepared under CAA section 179B could consider emissions **emanating from North American or intercontinental sources and is not restricted to areas adjoining international borders.** *Id.*

International Transport Guidance

- EPA is currently developing supplementary technical information and guidance to assist air agencies in preparing demonstrations that meet the requirements of CAA 179B. *Id.*

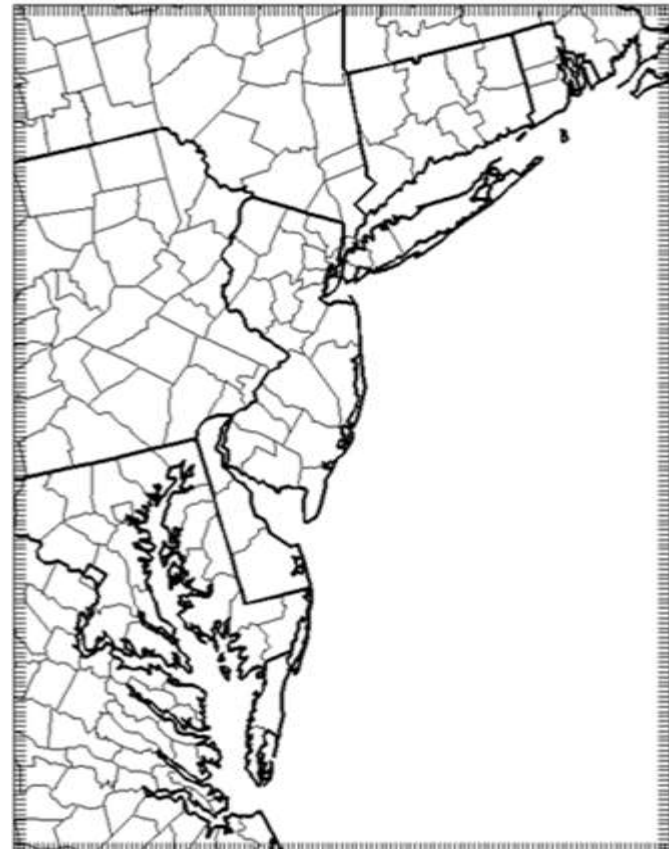
Updated OSAT Modeling

- Using 4kei platform, reran OSAT for both 4km domains to determine contribution to monitors
 - Categories: anthro, bio/fire, other, IC/BC
 - Combining anthropogenic categories into one source group allowed processing of both domains at once

4km CAMx Domains



Lake Michigan



Mid-Atlantic

New OSAT Results – Fairfield, CT

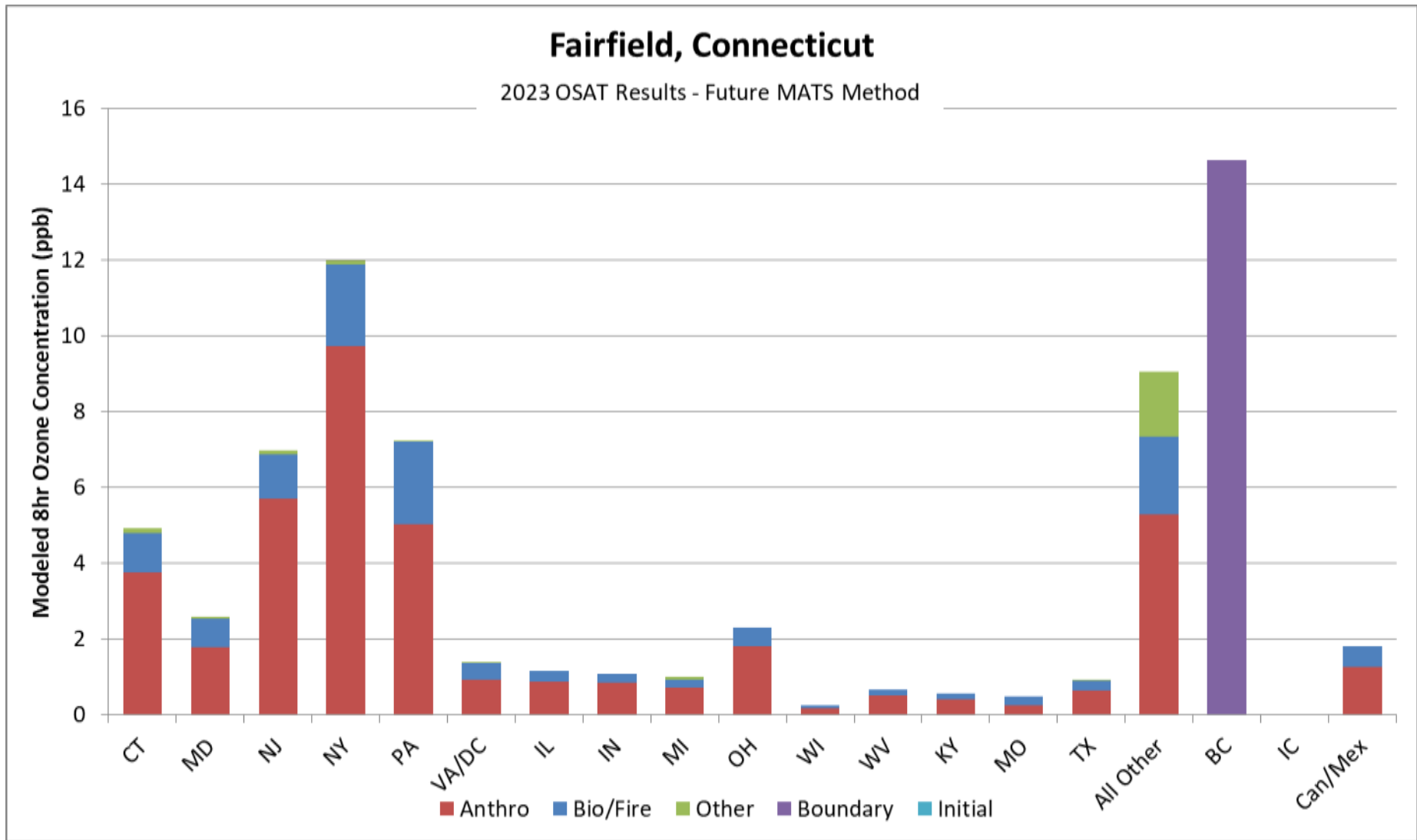
Monitor	90013007	Fairfield, Connecticut			CSAPR DV (Ave)		69.2
2023 OSAT Results (Modeled ppb) -- Future MATS Method							
Region	Anthro	Bio/Fire	Other	Boundary	Initial	Total	% of Total
CT	3.77	1.05	0.11	0.00	0.00	4.92	7%
MD	1.80	0.74	0.06	0.00	0.00	2.60	4%
NJ	5.71	1.16	0.13	0.00	0.00	7.00	10%
NY	9.73	2.16	0.12	0.00	0.00	12.01	17%
PA	5.04	2.18	0.03	0.00	0.00	7.26	10%
VA/DC	0.93	0.45	0.01	0.00	0.00	1.39	2%
IL	0.88	0.30	0.00	0.00	0.00	1.18	2%
IN	0.85	0.24	0.00	0.00	0.00	1.09	2%
MI	0.73	0.21	0.07	0.00	0.00	1.01	1%
OH	1.83	0.48	0.00	0.00	0.00	2.31	3%
WI	0.18	0.08	0.00	0.00	0.00	0.26	0%
WV	0.52	0.15	0.00	0.00	0.00	0.67	1%
KY	0.43	0.14	0.00	0.00	0.00	0.56	1%
MO	0.27	0.23	0.00	0.00	0.00	0.49	1%
TX	0.64	0.27	0.03	0.00	0.00	0.94	1%
All Other	5.31	2.05	1.71	0.00	0.00	9.06	13%
BC	0.00	0.00	0.00	14.64	0.00	14.64	21%
IC	0.00	0.00	0.00	0.00	0.00	0.00	0%
Can/Mex	1.28	0.52	0.00	0.00	0.00	1.81	3%
Monitor Total	39.89	12.40	2.26	14.64	0.00	69.20	100%

Indicates significant contributor at 1 ppb

Indicates significant contributor at 1% of NAAQS

Indicates Can/Mex contribution enough to attain NAAQS

New OSAT Results – Fairfield, CT



New OSAT Results – Suffolk, NY

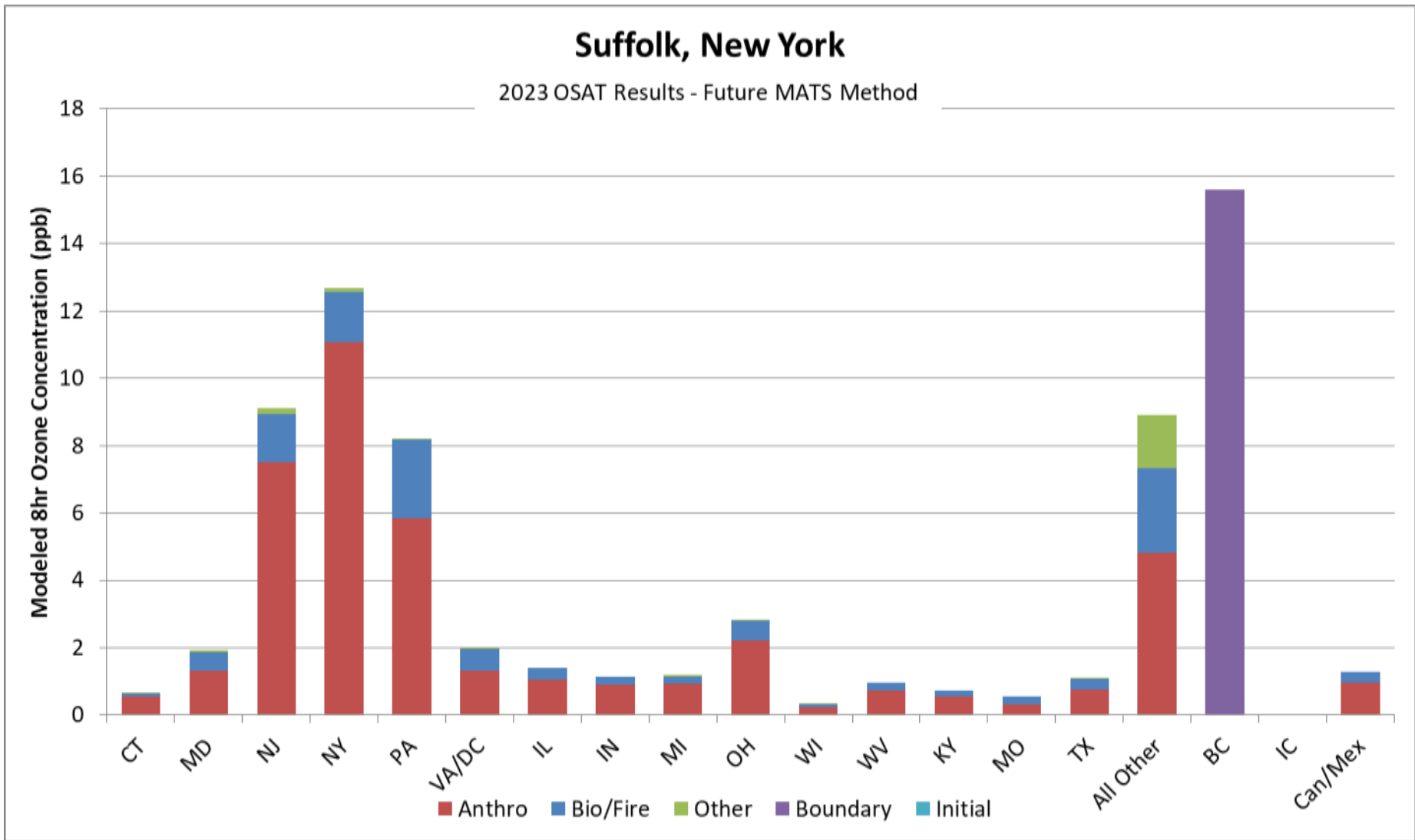
Monitor	361030002	Suffolk, New York			CSAPR DV (Ave)	70.6	
2023 OSAT Results (Modeled ppb) -- Future MATS Method							
Region	Anthro	Bio/Fire	Other	Boundary	Initial	Total	% of Total
CT	0.55	0.08	0.02	0.00	0.00	0.65	1%
MD	1.33	0.55	0.04	0.00	0.00	1.92	3%
NJ	7.49	1.45	0.17	0.00	0.00	9.11	13%
NY	11.08	1.49	0.12	0.00	0.00	12.69	18%
PA	5.85	2.34	0.03	0.00	0.00	8.22	12%
VA/DC	1.31	0.65	0.01	0.00	0.00	1.97	3%
IL	1.06	0.36	0.00	0.00	0.00	1.42	2%
IN	0.90	0.24	0.00	0.00	0.00	1.14	2%
MI	0.92	0.22	0.06	0.00	0.00	1.20	2%
OH	2.23	0.56	0.01	0.00	0.00	2.80	4%
WI	0.24	0.09	0.01	0.00	0.00	0.34	0%
WV	0.74	0.21	0.00	0.00	0.00	0.95	1%
KY	0.55	0.19	0.00	0.00	0.00	0.74	1%
MO	0.31	0.26	0.00	0.00	0.00	0.56	1%
TX	0.76	0.32	0.02	0.00	0.00	1.10	2%
All Other	4.83	2.50	1.56	0.00	0.00	8.90	13%
BC	0.00	0.00	0.00	15.60	0.00	15.60	22%
IC	0.00	0.00	0.00	0.00	0.01	0.01	0%
Can/Mex	0.96	0.33	0.00	0.00	0.00	1.29	2%
Monitor Total	41.11	11.83	2.05	15.60	0.01	70.60	100%

Indicates significant contributor at 1 ppb

Indicates significant contributor at 1% of NAAQS

Indicates Can/Mex contribution enough to attain NAAQS

New OSAT Results – Suffolk, NY



New York SSCT Proposal

- New York State Department of Environmental Conservation has just noticed for comment new regulations to Subpart 227-3 of Title 6 NYCRR "Ozone Season Nitrogen Oxides (NO_x) Emission Limits for Simple Cycle and Regenerative Combustion Turbines."
- phase in beginning in 2023 with full implementation in 2025
- “despite DEC's past efforts, EPA's failure to address emissions transport has resulted in New York falling short of attaining the ozone NAAQS making more in-state emission reductions necessary”
- written comments will be accepted through May 20, 2019 and may be submitted via mail to: NYSDEC Division of Air Services Attn: Ona Papageorgiou, P.E., 625 Broadway, Albany, NY 12233.
- The full notice is available at: <https://www.dec.ny.gov/regulations/116131.html> .
- Press coverage: <https://www.timesunion.com/business/article/State-targets-oldest-dirtiest-power-plants-to-13652544.php>

New York RIS

- “Older SCCTs have adverse impacts on NYMA air quality and make it difficult, if not impossible, for New York to meet air quality goals and CAA requirements.
- “The emissions from these units typically occur during high ozone days and are concentrated in the NYMA which, as described above, does not attain the 2008 or 2015 ozone NAAQS.
- ”(CMAQ) modeled July 23, 2011 and showed that old SCCTs located in New York State contributed 0.0048 ppm to downwind monitors that currently show nonattainment.
- “With a protective ozone NAAQS, set at a level of 0.070 ppm, it is clear that these sources alone have the ability and potential to significantly impact attainment of the ozone NAAQS.
- ”These control programs will assist New York in meeting CAA SIP obligations as well as the 2008 and 2015 ozone NAAQS, for which the New York-Northern New Jersey-Long Island area is in nonattainment.
- “New York significantly contributes to nonattainment monitors in the Connecticut portion of this nonattainment area. Currently, attainment must be reached by June 20, 2021 for the 2008 ozone NAAQS and August 3, 2024 for the 2015 ozone NAAQS. DEC is currently working on a suite of regulations, both new and revised rules, in order to further reduce New York's impact on downwind ozone levels.